Abstract

The present invention relates to the use of ZnT-1, originally described as a zinc transporter, in the regulation of L-type calcium channels (LTCC). In this study, the inventors have unexpectedly demonstrated that ZnT-1 physically interacts with LTCC, regulating its function. Most importantly, the inventors have shown that ZnT-1 can regulate intracellular Ca_{2+} influx, and thus, its intracellular concentration. This is the first demonstration of a natural blocker for LTCC, and it is a promising breakthrough as a potential agent to be used in the treatment and/or prevention of cardiovascular diseases and related indications.